REMARKS

This Amendment is in response to the Office Action mailed from the U.S. Patent and Trademark Office on September 28, 2004. All objections and rejections are respectfully traversed.

Claims 1-9 are pending in the application.

In the paragraph on page 1 lines 3 through 13 of the specification, the related U.S. Patent Applications referenced therein have since issued as U.S. Patents. The paragraph was updated to reflect this change in status. In addition, the word "SPACIAL" was changed to "SPATIAL" to correct a misspelling. Applicant respectfully requests that the Examiner accept the above changes to the specification.

At paragraph 2 of the Office Action, claims 1-9 were rejected under 35 U.S.C. §112 as being incomplete for omitting essential steps. Claims 1, 4 and 7-9 were amended to overcome this rejection.

At paragraph 3 of the Office Action, claims 1-9 were rejected under 35 U.S.C. §102 as being anticipated by U.S. Patent No. 6,775,295 to Lothberg et al., hereinafter "Lothberg."

The present invention relates to a technique for reducing the maximum number of hops needed to transfer information between any two nodes in a scalable multidimensional ring network (MRN). According to the technique, new rings which enable data (e.g., packets) to be transferred between nodes on the same rings are added along an additional ("W-axis") to produce the MRN. The new rings are created independent of the node chosen as a starting node and of a walking order used to select the next node in the new ring. The new rings are added by (a) selecting a node identification algorithm, (b) selecting an initial node as a first node in the new ring, (c) applying the node identification algorithm to the selected node to calculate a subsequent node in the new ring, (d) making the calculated node the selected node, (e) repeating c-d until the initial node is selected thereby creating the new ring and (f) repeating b-e until all nodes in the scalable MRN have been processed, thereby creating all new rings in the scalable MRN.

Lothberg describes a MRN that includes a plurality of network processing devices connected together with a plurality of individual ring networks. See Col. 1, lines 58-60. The

rings logically connect devices along X, Y and Z axes. The rings are connected together to form a matrix or lattice of ring networks. Ring networks that logically intersect with each other in the matrix or lattice are coupled to a node logically located at that intersection. See Col. 3, lines 21-38 and Col. 3, lines 47-51.

Referring now to the rejection under 35 U.S.C. §102, representative claim 1 recites in relevant part:

> 1. A method of increasing network processing node interconnect capacity and reducing maximum hop count in a scalable multidimensional ring network by creating additional rings comprising the steps of:
> (a) *selecting a node identification algorithm;* ...
>
> (c) *applying the node identification algorithm* to the selected node *to calculate a subsequent node in the new ring;*...

Applicant respectfully submits that Lothberg does not teach either explicitly or impliedly Applicant's claimed combination of *selecting a node identification algorithm* and *applying the node identification algorithm* to a selected node *to calculate a subsequent node in a new ring.*

The MPEP at §2131.01 states that:

> "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP §2131.01 quoting Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Lothberg does describe and illustrate a MRN that contains devices logically connected together by rings established along X, Y and Z axes. However, nowhere does Lothberg teach or suggest, either explicitly or implicitly, *selecting a node identification algorithm* and using the selected algorithm to *calculate a subsequent node in a ring* as is claimed by Applicant. Because of the absence of Applicant's claimed combination of *"selecting a node identification algorithm"* and *"applying the node identification algorithm* to the selected node *to calculate a subsequent node in the new ring,"* Applicant believes that Lothberg is legally precluded from rendering Applicant's claims 1-9 anticipated under 35 U.S.C. §102.

All independent claims are believed to be in condition for allowance.

All dependent claims are believed to be dependent on believed to be allowable independent claims and therefore are believed to be in condition for allowance.

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Favorable action is respectfully requested.
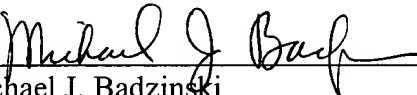
Information Disclosure Statement

An Information Disclosure Statement (IDS) is being filed concurrently herewith. Entry of the IDS is respectfully requested.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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